The MAC Flyer

DECEMBER 1978

Seasons' Greetings

Starlifter Finishes Fifteen . . . page 10

MILITARY AIRLIFT COMMAND

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The MAC Flyer

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For Greater Safety and Efficiency in MAC Air Operations

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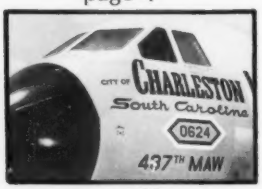
page 4



page 10

page 23

CINCMAC's Christmas Message 3
Alone 4
The Great Watertown Snowplow Caper 8
Starlifter Finishes Fifteen 10
The Sage Brush 12
More Than You Bargained For 13
The Airlift Legacy 16
Deja Vu: Taegu AB 18
When Flying Was for the Birds 19
Looking Back at Human Factors 20
Global Notes 22
C.R. Terror 23
Quick Stoppers 27
After Deadlines 30
Annual Index 31

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Flyer Call

The world received a slightly premature Christmas present 75 years ago this month that has had more impact on our lives and fortunes than perhaps the wildest Yuletide gift we could imagine. That present was the advent of powered flight, which took place December 17, with relatively little fuss and fanfare on a lonely beach in North Carolina. Few people at the time, and for many years afterward, had any idea of the importance of the events at Kitty Hawk—that a frail flying machine's 12-second defiance of gravity was ushering in an era of technology which would sweep mankind from the horse and buggy days into the space age in less than three-quarters of a century. And it's just as easy for us in 1978 to be blase about our aerospace "roots" when we routinely circumnavigate the globe in cargo aircraft with fuselage and wing dimensions that exceed the distance of the first successful adventure into self-propelled flight. Pausing to acknowledge our debt to the two fathers of modern aviation is certainly appropirate on the 75th anniversary of their achievement. But even more than that, it should give each of us an opportunity to take stock of the important role we in the Military Airlift Command play in preserving and continuing the tradition inherent in that unique Christmas gift given to mankind by the Wright brothers back in 1903. **JGG**

CINCMAC's Christmas Message

GEN WILLIAM G. MOORE, JR.

The Christmas/New Year's holiday season is traditionally a time for merriment and celebration. Since it is also an occasion for reflection and introspection, I would like to share a few thoughts with you.

This past year has been an interesting and somewhat perplexing one for me and for the Military Airlift Command . . . sort of a good news-bad news situation. The good news is that we have accomplished every phase of our various missions, from heroic rescues to "routine" worldwide airlift, and we've done it in the dependable, professional manner that has become a MAC hallmark.

We were Colonel Clyde Bennett and Captain John Oxenham running ALCE's in Zaire, working C-5/C-141 sorties in support of a Nation's freedom, and the combat documenters recording that operation. We were SSgt Bob La Pointe leading a rescue-training mission to the top of Mount McKinley. We were line crews and support folks—Reserves and Active—bringing peace-keepers from all over the globe to Lebanon in support of United Nations efforts there. We were floor-loaded 141's lifting hundreds of Eniwetokese out of the way of a typhoon, and Herks, Starlifters, and Galaxies hauling snow-clearing gear to dig out the Ohio valley and the Northeast in Sno-Blow I and II. We were the SAM's and airlift support people working high-visibility, articulately-prepared missions outside the "system." And we were the Weather people, computer-assisted now, flowing meteorological data worldwide. We were all these people and things spread out all over the globe—and air evac, security police, supply, personnel, and engineers back at the home drome. We've been all of these this past year—we're MAC!

With the vitality of our charter and the real day-to-day mission challenges that our people throughout the Command have met so well, though, there is a bad-news side to the picture.

Coming out of 1977 with the Secretary of the Air Force Safety Award, we've had four major aircraft accidents in '78—tragedies which took several lives and destroyed millions of dollars of our critical airlift inventory. And we've had a bunch of near-misses, too—incidents which tell me that we've got a lot more work to do in the safety-consciousness business.

For a variety of reasons—some valid and some perceived—a number of our fine, experienced people are leaving the Air Force. Some separate early voluntarily, while others retire at the minimum 20 years. The rest of us must shoulder an extra load until our new people can take up the slack.

As we enter 1979, we face some real challenges and opportunities in MAC. I want you to know that I am doing everything I can to make life in our airlift operations and technical service communities as safe, satisfying, and rewarding as possible—but I know that I can only do so much from here at Scott. I have to have your continuing support and your feedback—your ideas and suggestions—on how we can improve in managing and using our share of the nation's defense resources better—and I'm talking about people as well as airplanes and equipment. Working together as we have in the past, I know we can intensify the traditions of excellence and safe and expeditious mission accomplishment that have gained worldwide respect and admiration for our command.

Thank you for your diligence, dedication, and hard work during 1978, and sincere wishes for good health, success, and happiness for you and your families from Mrs. Moore and me.

William G. Moore

Honorable Mention, 1978 MAC Flying Safety Writing Contest

Alone

"The primary consideration during any emergency is to MAINTAIN AIRPLANE CONTROL."

—Introduction to the Emergency Procedures Section, C-5 Dash One (good guidance for anybody who flies, as this story graphically illustrates).

by Maj J. Alan Hassell
HQ MAC Aircrew Stan/Eval

The National Anthem was just ending and the usual noise of the audience died down as the movie screen curtains opened. Suddenly, a red light on the wall to the left of the movie screen lit up and below it appeared the message RESCUE SCRAMBLE.

"I can't believe it," were the only words from Airman First Class Rogers, the junior member of the pararescue team.

"You better believe it. Let's go," barked Master Sergeant Baxter, grabbing his jacket and alert radio. He was jumpmaster and the leader of the two-man pararescue team on alert at NAS Keflavik.

The sky was bright even though it was 8 p.m. as Baxter and Rogers came out of the theater, and the black volcanic mountains were still clearly visible against the summer sky to the east of the naval base. Baxter turned on the radio. "Command Center, rescue team is outside the base theater ready for pickup." He had no more than finished the transmission when he saw an alert vehicle wheeling around the corner.

They jumped into the truck, and Baxter had the door barely closed when First Lieutenant Jaboski hit the accelerator and the vehicle lurched forward. Captain Miller, the aircraft commander, shook his head at his young co-pilot's driving and turned to Baxter.

"Got a Piper 200 en route from Goose Bay to Reykjavik that's running low on fuel. Command Center says he's about 350 miles southwest. Start suiting up as soon as we get airborne. If this guy goes in, we'll plan on deploying you—conditions permitting."

Once at the aircraft, the crew began setting up to launch. While the cockpit crew scrambled up the ladder to the flight station, Baxter and Rogers started preparing their equipment. The sound of the auxiliary hydraulic pump could be heard above the noise of the power cart.

Baxter looked up from his equipment; he was pleased to see that his young counterpart had already set out most of his wet suit gear.

In the cockpit, the starting-engines checklist went smoothly. Number three engine came up to normal ground idle rpm, and Jaboski noticed the flight engineer looking intently at the voltage and frequency meters on the overhead panel. "Got a problem, Sarge?"

"No, sir. Had to reset the ATM twice before it would stay on the line, but it looks okay now."

Within minutes, the remaining engines were started, and the HC-130 taxied rapidly toward runway 30 for an immediate take-off.

Once airborne, the Herk was turned to the heading the navigator had plotted for a head-on intercept with the distressed aircraft.

"Pilot, nav. If this guy's position is anywhere near accurate, we should intercept him in 30 minutes. I sure hope he stays VMC 'cause I'm having trouble with the radar."

Twenty minutes later, Sergeant Baxter and Airman Rogers had completed their preparation for possible deployment. As Baxter climbed the ladder to the flight deck, he realized the "front enders" were just about to intercept the distressed aircraft.

"Damn autopilot won't stay on," mumbled the AC as he flipped the switches off. "Don't let me forget to write it up when we land."

Holding down the number two VHF/DF switch, the right-seater watched the needle on the center console rotate, then stop and hold steady. "DF shows bearing 225 degrees. Should be just off—"

Suddenly, the flight engineer leaned forward and pointed out the window. "Pilot, engineer. There he is at 12 o'clock. Slightly low."

"Rog, got him," said Miller as he retarded the throttles and started to descend. "Piper Two-Eight-November, this is Air Force Rescue Nine-Five-Eight-Three-Zero. We've got visual contact at your 12 o'clock. Maintain your heading and attitude and we'll join up on your right wing."

"Rescue Eight-Three-Zero, this is Two-Eight-November and I'm just about out of fuel. I think I'm gonna have to put it in."

Jaboski listened intently as Miller tried to calm the distressed pilot and give him some guidance.

While Miller was slowing the HC-130 to 110 knots, he noticed Baxter standing behind the co-pilot's seat. "Jumpmaster, pilot. Are you folks ready to go?"

Suddenly, the flight engineer leaned forward and pointed out the window. "Pilot, engineer. There he is at 12 o'clock. Slightly low."

Baxter grinned and keyed his interphone button. "Yes, sir! Soon as we get the okay from Command Center, we'll be gone."

Moments later the HC-130 crew saw the propeller on the Piper abruptly come to a stop, and watched as the small aircraft began a glide that took it closer and closer to the ocean below.

Remaining off the Piper's right wing, the Hercules also began a descent. Then, as the light aircraft passed through 300 feet, the HC-130 leveled off and waited. Seconds passed like hours while all eyes watched the Piper skim over the waves. Then, finally, with a cloud of spray, the small craft hit the surface.

When the Piper impacted the waves, Lieutenant Jaboski reached up and moved the toggle switches to drop two sea dye and two smoke markers. Simultaneously, Miller started a climb to 1,000 feet.

"Pilot, jumpmaster. We'll be ready in the back for the deployment checklist in about three minutes."

"Roger, Jump," responded Miller. "Command Post just told us that we're clear to drop. We'll make this a minimum-size pattern to get you guys out ASAP."

With the left paratroop door open, Sergeant Baxter could clearly see the Piper floating, its location highlighted by the sea dye and smoke markers.

While the AC maneuvered the HC-130 onto a final-approach heading for the drop, Baxter noticed the pilot of the light aircraft getting into a small yellow liferaft.

Passing over the Piper, Baxter reversed his count until he finally came to his exit point and stepped from the aircraft. Rogers went out immediately behind him.

With their canopies fully inflated, the two PJ's deployed their liferafts and maneuvered their chutes to get as close to the tiny aircraft as possible.

Fifty feet, thirty feet, ten feet. The sea, Baxter thought, looked a lot calmer at 1,000 feet than it did now. The swells seemed to be about four feet high as he took a quick final glance at the ocean below him. Seconds later, he and

Rogers were in the water.

In the Hercules orbiting overhead, the crew prepared to deliver an MA-1 sea rescue kit. The two seven-man rafts and the three bundles of survival equipment would mean the difference between life and death to the three men in the water should the HH-3E Jolly Green from NAS Keflavik be unable to make the recovery as planned.

No one noticed the vertical velocity indicator starting to drop off or the altimeter going through 100 feet.

"Rescue Eight-Three-Zero, this is Barracuda. We'll need an MA-1 kit ASAP. Survivor is okay. A little shock and a scrape or two but generally in good shape."

"Roger, Barracuda," answered Miller. "Starting our MA-1 kit pattern at this time."

As the HC-130 passed over the three small rafts, Baxter could see the loadmaster waving from the edge of the ramp. He gave the load a quick wave back, then turned to assist Rogers.

With their briefing accomplished, the Herk crew ran rapidly through the equipment-delivery checklist.

Once established on final approach for the drop, Miller gave the final command to position the MA-1 kit. "Thirty seconds to target, extend ODS." He barely had the words out of his mouth when he heard Jaboski.

"Pilot, we got an anti-skid inop light. Switch is off and all pressures look okay."

Everything looked perfect as the HC-130 approached the four liferafts at 300 feet. Airspeed and altitude were stable and a five-degree crab into the wind had taken care of the drift. Only a few seconds more.

Suddenly, Miller heard the voice of the engineer. "Pilot, engineer. The number two engine fuel boost pump light just came on. I think we've got essential AC bus problems."

"Roger," responded Miller. Just a few seconds more, he thought. "Ten seconds, ready, drop!"

On command, Jaboski depressed the ODS release button and the MA-1 kit ran through its deployment sequence.

From his one-man raft, Baxter looked up. The drone of the four big turboprops was a comforting sound. As the C-130 approached overhead, he could see the MA-1 kit dropping from the rear of the aircraft.

The kit hit the water a mere 40 feet from the two pararescuemen, and Baxter heard Rogers shout, "Absolutely beautiful."

Above them Captain Miller started a left turn which would bring him back over the target so he could observe the status of the drop. "What's the situation, engineer?" he asked.

"Can't get the ATM on the line, sir. But I'm sure it's the essential AC bus giving us the problem."

Miller took a quick glance to his right, noticing Jaboski intently watching the flight engineer trying to reset the ATM. Suddenly Miller saw the select-power-out warning light on the copilot's AC inverter illuminate. Realizing the engineer was busy trying to get the ATM on the line, Miller reached up to select a new power source.

No one noticed the vertical velocity indicator starting to drop off or the altimeter going through 100 feet.

Sergeant Baxter reached for the closest MA-1 kit bundle. As he turned to pull it back to the rafts, he spotted the HC-130 in a left descending turn toward the water. "Oh, my God!" he gasped.

A moment later, the Hercules hit the sea. There was a muffled explosion and a plume of spray rose from the water. Then silence.

Rogers looked in amazement at Baxter's disbelieving eyes. The only sounds were the waves hitting the sides of the liferafts and the wind.

They were alone.

ABOUT THE AUTHOR

Major Hassell entered the Air Force in 1966 following graduation from Allegheny College, where he was a Distinguished Military Graduate of the ROTC program. After completion of UPT at Craig AFB, he was assigned to the 67 ARRS, Moron AB, Spain. Following a unit move to RAF Woodbridge, England, he completed a SEA tour with the 39 ARRS.

Returning to the CONUS, Major Hassell was first assigned to the 1550 ATTW and later transferred to Scott AFB for duty in the HQ ARRS Directorate of Aircrew Standardization. He has 4,600 hours in the HC-130 and is currently working on the HQ MAC staff as the HC/WC-130 standardization pilot.

'TIS THE SEASON•••

. . . to enter the MAC Flying Safety Writing Contest. Why now? Because it's the time of year when we talk about the joys of giving—and what could be a better gift than sharing a war story, technique, or bit of safety philosophy, and thereby helping to keep somebody alive? There's a tremendous amount of expertise and experience among *TMF's* readers, and the contest gives you a chance to share those goodies with everybody—not just the folks on your crew.

On the other hand, our appeals aren't just restricted to altruism. There are some material rewards, too: A free C.R. Terror T-shirt and a one-year *TMF* subscription for every entrant whose story meets the contest criteria. So do yourself, and the rest of us in the flying game, a favor. Grab your favorite writing implement and jot down your favorite story, keeping the following rules in mind:

1. Anybody can enter.
2. Your entry can be poetry or prose, fiction or nonfiction, fact or philosophy, but it has to be original, unpublished, and related to flying safety. It should be about 1,000 to 3,000 words long—that's somewhere between 6 and 14 typewritten, double-spaced pages. (Poetry can be shorter, but be warned—a limerick or two isn't enough.)
3. Type your creation on 8 by 10½-inch paper, double-spaced, in two copies. Identify the story itself by title only, but attach a separate cover sheet with your name, mailing address, unit and a brief autobiography. And don't forget your T-shirt size.
4. Mail your entry to:

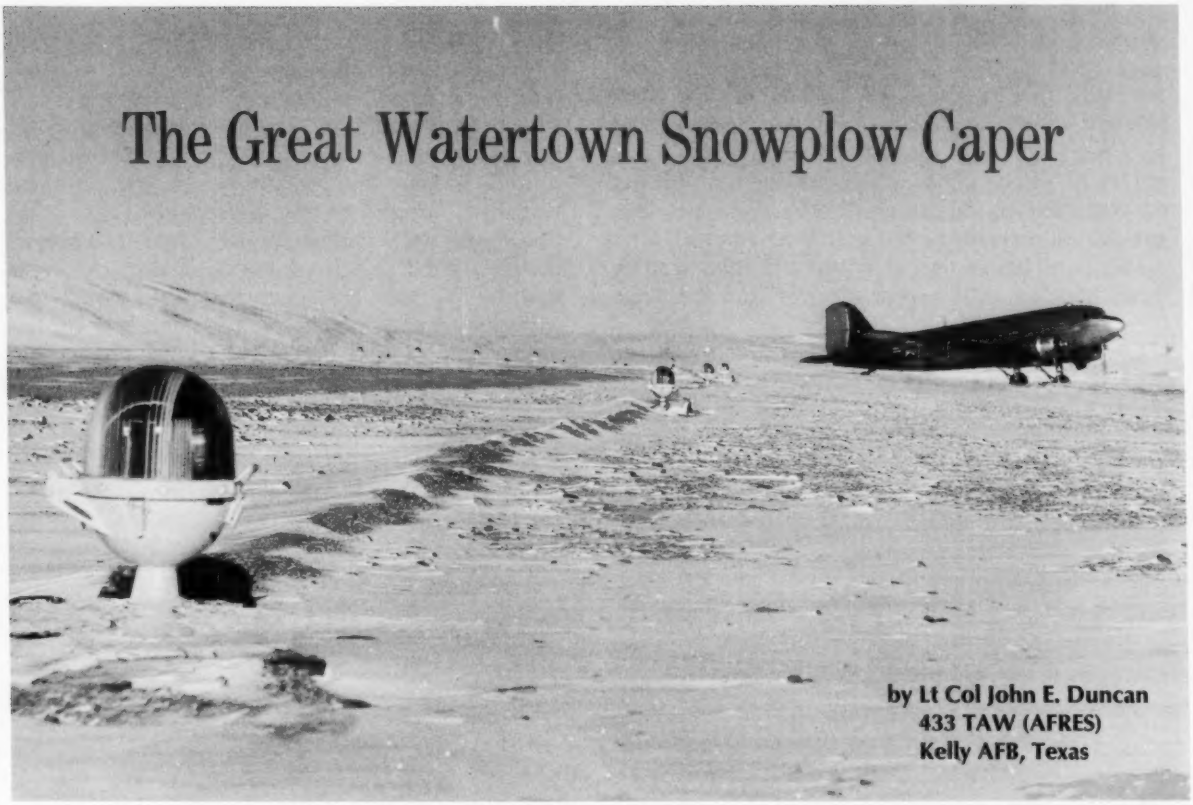
   MAC Flying Safety Writing Contest
   HQ MAC/IGFE
   Scott AFB IL 62225

Get your entry in the mail by 31 March 1979. Then sit back and wait for honor and glory to come your way . . .

Along with a C.R. Terror T-shirt, of course.

"Material rewards," see above.

The Great Watertown Snowplow Caper



by Lt Col John E. Duncan
433 TAW (AFRES)
Kelly AFB, Texas

Nostalgia buffs should enjoy this wintry tale of a tail-dragging Gooney Bird that goes for an unauthorized romp in the snow.

Possibly the last and most misunderstood of the tail wheelies was a spiffy, two-motored, fixed-wing, subsonic, aerospace vehicle, known by one and all as the C-47 or Gooney Bird, aptly named for the strange landing birds of Midway Island. During the late forties through the mid-sixties, the ubiquitous C-47 not only provided a good bit of the pax and trash haul, but gave the behind-the-desk types most of their joyriding opportunities.

The craft was normally reliable, gentle, and forgiving to all manner of sins of omission and commission, except in crosswinds. In high winds both the novice and the expert had fun and frivolity merely taxiing, since on its ill-tempered days, the C-47 would even try ground loops in the chocks.

It came to pass, in the winter of '64, Powers That Be in operations noted that one of the flying instructors had not obtained his monthly jollies in the C-47. Not wishing to deprive him of the finer things in life, orders were issued to drive up to Watertown, New York, to fetch some snowplow equipment. As there are no innocents in this tale, to protect the guilty, we'll just call our IP, Captain Sam. Very early the next morn, Sam & Company, more asleep than awake, heard the forecaster announce that a weak frontal system was just passing Watertown. "By your ETA," he continued, "things should be all cleaned up and moved out."

"No sweat," Sam replied. Now you long-term readers of *TMF* know that when anyone says, "No Sweat" or "A Piece of Cake," there's gonna be trouble in River City. Sam and crew were no exceptions. By the time they had motored up to the Watertown VOR, that weak front had eaten Wheaties and done pushups all morning. It was now a strong front, throwing out lots of semi-solids and kicking the winds around. The field showed 400 feet overcast, partial obscuration in moderate to heavy snow, three-

quarters of a mile viz, and winds at 15 knots, 40 degrees off runway heading with no takers.

After several turns in the holding pattern, Sam performed his basic VOR approach routine, executed nicely, and broke out at minimums. But to his dismay, only acres and acres of the fluffy, white stuff lay ahead. Snow, snow everywhere, but nary a runway in sight. Then the intrepid pilot spied the rotating beacon of a snowplow working the approach end of the runway and lined up on it. Touchdown was uneventful, except that the white-on-white situation played nasties on Sam's depth perception, so arrival was a tad sooner than expected. The venerable aircraft suddenly resembled a great pogo stick, and if Guiness was making book on landing bounces, Sam would have the record; in fact, he could have retired the cup on bounce height alone. Finally the bird slowed its mating dance, everyone relaxed, smiled sheepishly and waited for the stewardess to break out the bubbly, as if this was a champagne flight. Faster than you can prostrate yourself in the direction of the Pentagon and say "Curtis E. LeMay," the airmachine made an abrupt left turn and raced across the snowy fields. With stubborn determination it headed directly toward the passenger terminal.

Not only were they fast approaching the terminal but also the taxiway, bordered by mounds of plowed snow. Very high mounds of snow. Not the best of all possible worlds.

Fortunately Sam's brain and luck were still engaged. He jammed in the power, ordered half flaps from the open-mouthed copilot, pulled the yoke into his gut, and sailed majestically over the offending taxiway, then lightly touched down in the field beyond. The Goon was transformed into a plow, flailing billows of snow clouds in all directions. To avoid bogging down, the ever-resourceful Sam kept the power up and somehow avoided all stray markers, poles, and stanchions. Executing a couple of neat right turns, he and friends were now back on the runway, only taxiing in the opposite direction of traffic. At last the tower broke the solitude, with an almost casual transmission. "Air Force 46371, you're cleared to the terminal, right turn, next taxiway."

Snow, snow everywhere, but nary a runway in sight.

Happily those were the days before the government suffered from an attack of alphabet soup and no one from OSHA, ERDA, EPA, or ERA (always thought that had something to do with baseball) arrived to press charges for damages to the snow, the environment, a trampled lichenwort, or anything at all.

The tower types were most kind, sharing coffee and condolences with the chagrined crew, as the falling snow rapidly covered the telltale tracks of Sam's sudden sojourn.

Now, as a rule, flying safety stories are a serious lot; they rarely fraternize with any of their other short story brethren, ostracizing pure fiction as too flippant and sci fi as nonprofessional. After all, when you're relating tales of aircraft running into one another or into granite clouds, the effects are sombre and antisocial, usually with a moral to be found.

"Therein lies the rub," as Hamlet's masseur said. Though I've cogitated on this sorry saga for lo these many years, I'm unable to produce anything even vaguely resembling a moral.

Perhaps it is best to close the sordid affair as did the Wing Higher Authority, when at a party several weeks later, before God and the whole madding crowd, he presented Sam with a papier-mâché anchor (one each, large) as a token of esteem and affection.

Although Lt Col Duncan failed to come up with a "moral" for his little war story, TMF feels there are several lessons to be learned. Depth perception on the white stuff remains a problem whether you are flying a C-47, a C-5 or anything in between. Certainly, crosswinds aren't as critical with modern tricycle gear equipped planes, but if you don't calculate carefully and prepare for them, sideways breezes can still score a "gotcha." Last but not least, it's a good idea to be sure that the folks on the ground are ready for your arrival. If they aren't equipped to handle your aircraft you may be setting yourself up for some big hassles.—Ed.

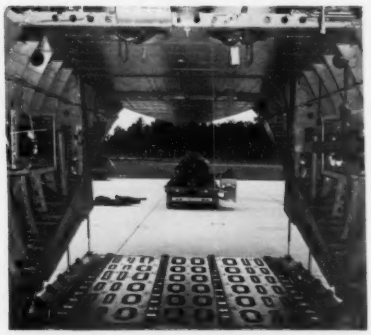
ABOUT THE AUTHOR

I was born a long time ago in Washington, D.C., and due to functional illiteracy had to borrow a degree in Alchemy and Metaphysics from George Washington University. As a pilot on active duty I drove such hot airships as the T-29, C-124, and you guessed it, the C-47.

I am now employed by the 433 TAW at Kelly AFB as a C-130B flight simulator instructor. My summer vacations are spent sloshing about the sewers of Paris, in search of Victor Hugo and Les Miserables. Recently I was nominated for president of the Flat Earth Society and plan to give my acceptance speech in the Los Angeles Coliseum.

Starlifter Finishes Fifteen

During the past decade and a half, C-141's have really delivered the goods; with planned modifications, Starlifters in future decades promise to be even more impressive.



On 13 December 1963, Lockheed and the Air Force celebrated the 60th anniversary of powered flight with the first flight of the C-141A Starlifter. Leo Sullivan, Lockheed's chief engineering test pilot, flew the first military turbofan transport off the runway at Dobbins AFB, Georgia, at 1245 EST, and brought MATS into the jet age.

Lockheed Model 300, the Starlifter, was the winner of a design competition with Boeing, Douglas, and General Dynamics/Convair for the first military cargo jet. When it rolled out of Lockheed-Georgia's plant, 22 August 1963, the C-141A set several records for the industry and the USAF: first jet aircraft originally designed as a military transport; most powerful engines (the Pratt

& Whitney TF33-P-7) and the largest wing (3,228 square feet) installed on any transport then flying; first jet transport designed for truck-bed-height loading and the aerial delivery of troops and equipment; and the first MAC aircraft to use the standard Air Force flight director and vertical-tape instruments.

MATS' new workhorse began flying line missions with the 44th Air Transport Squadron, Travis AFB, California, during the summer of 1965. In November of that year, Starlifters were delivered to Dover and Charleston AFB's. Charleston's first C-141 was auspiciously designated the "City of Charleston, South Carolina."

The C-141 was the major "pack mule" on the air supply line from the CONUS to SEA throughout the Vietnam conflict. It delivered the goods and soldiers to that theater with unprecedented speed and revolutionized rapid air evacuation of the wounded. Perhaps the most satisfying and noteworthy mission accomplished by the C-141 and its crews during that war, however, was "Operation Homecoming." The C-141's were true freedom birds when they flew into Hanoi to bring out American prisoners of war.

The Starlifter has been modified over the years to improve its efficiency and safety, but the basic airframes of MAC's 271 C-141's have logged over 5,000,000 flying hours and exceeded their original programmed service life by five years. Experience in Vietnam and later crises, such as the support of Israel in 1973, proved that the space available in the C-141's cargo compartment was quite often filled before its 70,000-pound maximum payload was reached. Consequently, the Air Force contracted with Lockheed to "stretch" the Starlifters by adding 280 inches to the fuselage. With this extra length, the C-141B will carry 13 pallets of cargo—three more than the C-141A. Also, the B models will be fitted with an aerial refueling port to give the stretched Starlifter extra range and mission flexibility. In effect, an aircraft that has more than proven itself for 15 years is going to be stretched to meet our country's growing strategic airlift needs well into the 1980's.

The SAGE BRUSH
McMAC AFB
1978 CFT SCORE 35.763 (YOU CAN'T WIN EM ALL)
CLOSED ANYWAY THERE'S NO ROOM IN THE INN MERRY XMAS
BOQ, TAQ, B-B-Q, VOQ, TLQ →
CLOSED & CLOSED, HAVE A MERRY...
DSSIFERS CLUB ↓ NCO CLUB ↑
CLOSED XMAS YA KNOW CALL MOTOR POOL
CREW BUS
OPEN 25 DEC 0850-1450
SWIMMING POOL → (FOR FOOTBALL POOL CALL OMS)
CLOSED XMAS TO SERVE YOU BETTER
SNACK BAR
CLOSED 25 DEC
BX ← ACP ↑↓ →
↓MESSAGES↓
CLOSED FOR THE SEASON CALL CREW BUS
MOTOR POOL →
MIDNIGHT SERVICES 0800 SHARP
BASE CHAPEL → (FORM 90s OUR SPECIALTY)
ROCK REED'S GIANT C-5A GALAXY
INCLUDES PARTS FOR WING MOD
AMST KIT
KIT #2548
AMST BUILD WITH 2 OR 4 JET ENGINES
THE BIONIC COLONEL
ONE (1) EA BIONIC COLONEL KIT INCLUDES WORKING BRICK & EAGLES THAT LIGHT IN THE DARK
REQUIRES SIX (6) "D" CELLS OR ONE (1) PACEMAKER
C141 UPGRADE KIT 2 PLUGS & AR MOD
ADDS 25 KLET
PLAY ALERT
CAPPER TOYS LTD
ONE TURN GOOD FOR 12 HOURS
U.S.
BLINK
BLINK

Hauling cargo is one of our "reasons for being" in MAC, but if you're not careful, you may take on . . .

More Than You Bargained For

by Maj James G. Gibson II
Supervising Editor

Of all the factors involved in airlifting millions of tons of cargo safely all over the world, one we tend to take for granted perhaps more than any other is, ironically enough, the cargo itself. Most of the time our only concern with the load is whether it is placed aboard the aircraft in a timely manner so we can depart on schedule. Generally speaking, the competence of the loading crews at most of our frequently transisted aerial ports and the proficiency of our loadmasters have permitted us the luxury of becoming somewhat complacent regarding considerations other than timeliness. Traveling to as many places as we do worldwide, though, we occasionally take on cargo at stations without modern, computerized facilities and maybe without people who have a well-developed sense of concern for precision and safety.

Sometimes an unsafe or incorrect load is obvious: the aircraft is perched on the ramp with the wings tilted at a rakish slant or the front strut is depressed so far you can barely see the nose wheels. Sometimes it isn't so obvious: overweight pallets evenly distributed throughout the cargo deck that inconspicuously overgross the airplane or tiedown chains attached to rolling stock in places that look solid enough yet can give way or permit excessive

movement during turbulence. But enough of the introductory remarks. Let's take a look at some actual cargo-related incidents and see if we can profit vicariously from the adventures and misfortunes of others.

Something Just Doesn't Look Right

A Navy C-118 was scheduled to pick up about 10,500 pounds of assorted goodies and fly them across the CONUS. The load was on pallets and the flight attendant calculated that 15 could be accommodated on the bird. Load weight was figured at 8,550 pounds, which wasn't overly heavy for the 118. But when the AC and his crew returned to the flight line from filing and filling themselves with greaseburgers, they didn't like the unusually nose-high attitude of their aircraft. After some discussion with the loading crew, a single pallet was pulled for a reweigh. It tipped the scales at 1,235 pounds —considerably more than what was on the manifest. When the dust settled and the actual weight of the load was added up, it came to 18,525 pounds instead of the 8,550 pounds on the paperwork! Had the flight crew accepted the airplane as it was, it would have been 2,000 pounds over its max structural limits and 5,000 pounds over the max takeoff weight limit. And if that wasn't bad enough, the aft CG was 31 percent of MAC (mean aerodynamic chord), which was only 2 percent below the 118's aft limit of 33 percent. Care to imagine how things would have gone on an attempted takeoff?

Haste Makes Waste

Here's one where two mistakes teamed up to do in a flight crew, their venerable DC-3, and a university basketball team. When the charter flight arrived three hours late to pick up the roundball squad, there was a lot of hustle to get the athletes and their gear on board. Seven minutes after landing, the twin-engine transport was loaded and airborne again.

Shortly after the old recip finally lifted off, tower controllers reported seeing it assume an unusually nose-high attitude.

Less than 90 seconds after liftoff, however, it came abruptly back to earth, killing all 29 aboard. Safety investigators pieced the causes of the tragedy together this way. In their haste to make up for lost time, ground handlers put nearly all the team's baggage into the rear compartment instead of placing 500 pounds in the forward compartment and 125 pounds in the rear as the manifest called for. This improperly positioned load created an abnormal CG and set the pilots up for control problems on takeoff. As soon as the Gooney Bird broke ground, the nose immediately pitched up steeply. Whether the pilot could have overcome the tail heavy configuration will never be known because there was an added factor—both the flight crew and the ground handlers had neglected to remove the red-streamered external flight control locks from the rudder and right aileron. Either mistake by itself would have been bad enough; together they virtually guaranteed a disaster.

Queasy Riders

Every so often cargo turns up that shouldn't even have been on board in the first place, and it can cause pilots and passengers alike some anxious moments. Not long ago a crew discovered gasoline coming from a pallet, so they made an emergency landing at the first available airpatch. When the offending pallet was torn down, a disassembled motorcycle was found concealed among the contents. The gas had been leaking from the cycle's partially filled gas tank.

Another crew had a similar problem with an improperly serviced fuel vehicle they were carrying. A rivulet of high octane gas running down the airplane's aisle during flight with 65 passengers on board was more than cause for alarm. Luckily for everybody involved, all that ensued was an elevated pucker factor until the

bird could be returned to terra firma and evacuated.

Deck the Deck with Boughs of Folly

With the yuletide season in close proximity, this episode is particularly appropriate for wrapping up our chronicle of cargo-oriented conundrums. It seems there was a load of Canadian evergreen trees which needed airlifting from Miami, Florida, to Caracas, Venezuela, in time for Christmas several years ago. The job fell upon a nonscheduled cargo-hauling Super Constellation and its crew, and on the evening of December 14, the bird was taxied to the loading ramp of a freight company at the Miami Airport. By noon the next day it was ready to go—the main cabin and forward and aft belly compartments stuffed with a total of 666 bundles of trees. Due to assorted maintenance difficulties, however, the Connie's takeoff was delayed nearly 12 hours. Shortly after the old recip finally lifted off, tower controllers reported seeing it assume an unusually nose-high attitude. Within a couple of minutes, the hapless tri-tail had crashed less than two miles from the airfield, killing the crew and six people on the ground.

Although the NTSB attributed the probable cause of the accident to overrotation of the aircraft at liftoff (causing it to enter the aerodynamic region of reverse command at near-stall speed and at too low an altitude to effect recovery), reasons for the overrotation could only be speculated upon. The load was a serious contender for the role of villain when the following facts emerged:

- The 666 bundles of trees were all stacked in an overlapping fashion from floor to ceiling with the butt ends of the trunks facing forward. No passageway was left from the front to the rear of the cargo area.
- The trees were not secured with restraints or cargo netting in the required manner, nor were they placed aboard with any regard for load distribution. It would have been easy for them to shift rearward in flight, especially at takeoff.

It only takes one batch of faulty cargo to bring you a lot of grief.

- No weight and balance form or manifest was filled out on the load.
- Although the bundles were supposed to average 33.5 pounds each, random bundles from the accident scene weighed an average of 42 pounds each.

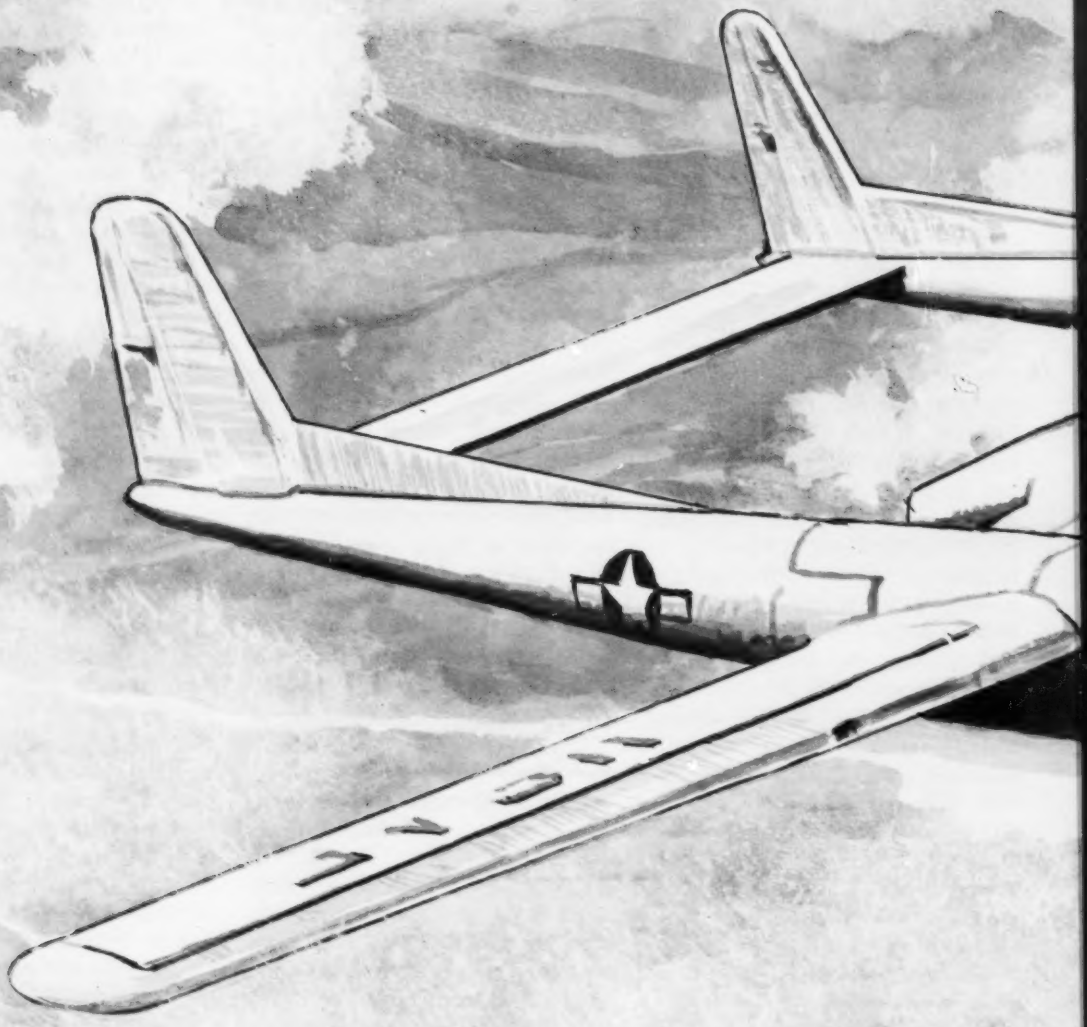
As if all the load discrepancies weren't enough, the Connie also had several mechanical idiosyncracies, including a landing gear safety solenoid which had to be manually overridden to raise the gear, and defective throttle friction locks, to name only two.

After looking at this assortment of load-related accidents and incidents, one fact practically jumps out at you. An unruly load all by itself can be a real hazard, but couple it with any other problem during flight and you're set up for almost certain disaster.

Fortunately, the odds against having a bad load palmed off on you are in your favor. But it only takes one faulty batch of cargo to bring you a lot of grief . . . or worse . . . so you've got to keep your guard up. It isn't easy to turn down something you're suspicious of, especially in the face of a determined ops or aerial port adversary who outranks you. Having the courage of your convictions can pay off, though, as it did for the Navy pilot discussed earlier or the MAC C-130 AC who balked at taking an Army van when the weight was uncertain and the "classified" contents couldn't be readily checked out by the crew. After all was said and done, the van got reweighed and it turned out to be around 15,000 pounds heavier than advertised. Everybody on station from the command post controller to the detachment commander tried to prevail on the reluctant AC, but he stuck to his guns and didn't get stuck with an overweight mystery load.

No doubt about it, you're a lot better off refusing questionable cargo or taking a delay to get it squared away than you would be accepting it and then finding out too late that you got more than you bargained for.

The Airlift Legacy



C-119 Flying Boxcar

The C-119 was Fairchild's ultimate development of its twin-tailboom airlifter which first flew as the C-82 Packet. With a pragmatic—if not beautiful —fuselage design, the Flying Boxcar carried 62 troops or over 25,000 pounds of cargo. The aft clamshell doors, which could be removed for equipment airdrops, also allowed vehicles to roll aboard easily.

The C model was powered by twin, water-injected Pratt & Whitney R-4360-20WA engines capable of producing about 3,500 horsepower each. The "dollar-nineteen" had a top speed of 281 mph at 18,000 feet and a service ceiling of 23,900 feet. Cruise speed was about 200 mph. Wing span was 109 feet 3 inches; length, 86 feet 6 inches; and height, 26 feet 6 inches.

Most of the Boxcars, assigned to troop carrier units in TAC, flew supply, medevac, and airdrop missions during the Korean War. They were also used to airdrop the bulldozers that helped build airstrips along the DEW line.

The last of 1,112 C-119's was delivered in 1955, but Boxcars served the Air Force and Air Reserve Forces throughout the Vietnam era. In addition to airlift and airdrop configurations, the C-119 had many variations for unusual missions including midair retrieval of space vehicles, electronic warfare, and gun ship duty.

Deja Vu*

*(day-zha-voo), [Fr. lit., already seen], the illusion that one has previously had a given experience.

Nestled in a river valley in southeastern Korea, Taegu AB is surrounded by rugged mountains. Within three miles to the north and east, the terrain rises abruptly to 1,200 feet above field elevation and continues up to almost 4,000 feet MSL eight miles northeast. A 4,068-foot peak 23 miles southeast is the highest point within 25 miles.

The single 9,039-foot runway (31/13) is 150 feet wide. Parallel taxiways on both sides can easily be mistaken for the runway on final, especially when it's hazy. The bowl-shaped valley seems to capture and hold the haze and smoke from the nearby city of Taegu, so restrictions to visibility tend to linger like essence of kimchee. An Army airfield is located four miles southwest, and at night it can be mistaken for Taegu. All low altitude maneuvering must be done west of the field, and missed approaches are relegated to that same area. Go-arounds from runway 13 present little immediate terrain hazard, but the high ground just to the north makes a go-around from runway 31 a bit more sporting. In this case, west is definitely best.

—Adapted from ISD-Q7-906

Taegu AB

Korea (Elevation 116 feet)

Primary instrument runway is 31. Hills rise abruptly within three miles.

Haze and smoke may restrict visibility—field is to the right.

Runway 13 has no VASI and final approach is over hills. Go-arounds from this position present few terrain hazards.

Two feathered flyers speculate as they watch two brand-new, human aviators trying out their wings in the good old days . . .

When Flying Was for the Birds

by Capt James P. Coe
Associate Editor

"What do ya think, Gertrude?"

" 'Bout what?"

"Do you think they'll try it?"

"Well, Cliff, it's pretty breezy, and a little cloudy —wind's kicking up some sand."

"Yeah, but that's the good thing about the Outer Banks, lots of sand for landings and good winds for soaring. I think they'll stay."

"Maybe so, Cliff; they have the dream."

"The what?"

"The dream of flying."

"I never dream about flying, Gertrude."

"Of course not, it comes naturally for you."

"Wow! What sound? Let's get out of here!"

"No, Cl wai hey started the engine. They're going t

"Look, ertrude, one of them is getting on the flying machine. I believe you're right."

"There he goes!"

"He's got it off the ground."

"They did it, Cliff, they really did fly."

"Aw, shucks, he landed already. They didn't get very far."

"Well, you didn't go too far the first time you flew either, Cliff."

"I guess you're right. Gertrude—"

"Yeah."

"Gertrude, do you think they'll try again?"

"Sure. They've always wanted to fly. They can't stop now."

"Who are those guys?"

"Just a couple of bicycle mechanics from Ohio."

"Oh. Well, let's get out of here before they try it again."

"Why do you want to leave? I'd like to stay and watch. This is a great day, Cliff. Men will remember December 17, 1903."

"I suppose you're right, but it scares me."

"How come?"

"Well, the next thing you know they'll try to figure how to talk to us seagulls."

"Come on, Cliff, that's silly. Why would they want to do that?"

"To find out what flying is *really* like."

"Don't worry, Cliff, they'll find out without our help."

Looking Back at Human Factors

How you feel can affect how you fly, and a mind cluttered with personal problems can really bring you down.

For the last few years most of MAC's aircraft accidents have been caused by aircrew errors—a sobering fact. As flyers, our first inclination may be to protest that the investigators blamed the crews for accidents that were caused by forces outside the cockpit, and this occasionally may be true. Some accidents were caused—at least in part—by management errors or other factors that the individual crewmen had no control over. However, the random errors that can be attributed to the fallibility of the crewman as a machine operator—a controller of energy—predominate the statistics.

With an eye toward prevention, here are some human factors problems and some recommendations that you may be able to use to reduce your personal accident potential.

Every crewmember is important because he may be the last person who can prevent an accident, but most research has been done on pilot factor accidents because they are the most plentiful. A great deal of what we say about pilots, however, applies to most other crewmembers.

Experience plays an important role in preventing accidents but, if it's misapplied, it can also help cause a crash. Federal Aviation Administration (FAA) statistics show that pilots with between 1,000 and 3,000 flight hours have more accidents than any other group. Of course, there are probably more pilots in that group to *have* accidents. FAA also offers an interesting explanation for the disproportionate involvement of these pilots in accidents: "The pilot with several thousand hours of air time is bound to be more proficient in the cockpit . . . as experience and skill accumulate, the pilot unconsciously reduces his operational margin for error and this margin becomes so thin that any unusual set of circumstances can break it down."

To serve safety, increased experience must breed improved judgment.

Another danger born of familiarity is mind set. When we make up our minds that a particular set of events—checklists, maneuvers, clearances—will happen, it is sometimes very difficult to recognize changes. The *Flyer* and other professional journals, civilian and military, have recently carried articles about crews who were programmed for landing, takeoff, or mission accomplishment—reality be damned—and had accidents as a result.

The preventive step is to remove "routine mission" from your vocabulary; believe that every mission will be different. The crew which sees no deviations, hears no conflicts, and asks no questions is like a flock of turkeys waiting to be administered the axe.

Research by the Naval Safety Center shows that personal problems affect your accident liability.

Are we saying that a happy crewmember is a safe crewmember? You bet we are. Personal problems—psychological stresses—can distract you from your flying job and increase your accident liability dramatically.

Aircrew managers can't always account for the life changes that affect their crewmembers, nor should they be expected to. You are the only person who knows for sure when your personal problems are affecting your flying. In a multi-place aircraft one distracted aviator probably won't cause a crash, but that same flyer probably won't prevent an accident either. A couple of examples from actual accidents show how powerful psychological stresses can be.

In the first instance, the scheduler put together what looked like a well-balanced crew for a fairly ordinary logistic mission. The aircraft commander was an ex-

tremely capable pilot and highly respected flight examiner. He had accumulated just under 3,000 hours since completing UPT, all in the aircraft type. The copilot was moderately experienced, with about 550 flight hours, 300 of them in the transport. The right-seater had had some problems early in the training program but was now fully qualified and progressing normally. The navigator was a below-average performer, even though he had over 1,000 hours experience. Counterbalancing him, the flight engineer was another strong crewmember with over 5,500 hours of flying time.

There were some other facts about the crewmembers that the scheduler didn't know, however. The AC had just finished two weeks leave. During his vacation, he flew his small civilian aircraft frequently and almost crashed it once due to an error in judgment. Being a top performer, he was very concerned about his near accident. The copilot was characterized by his family and friends as a worrier. He had returned from three weeks leave less than 48 hours before the mission and, the evening before the crash, his wife had announced that she was pregnant. On a "routine" mission their transport crashed on final approach, killing all aboard. Investigators found no mechanical failures, and the weather was not a significant factor. Had the pilots made a mistake? Probably. Were one or both pilots distracted by personal problems? Possibly. How about habit pattern interference or mind set? We'll never really know, but the possibility is there that they also played a role.

The can-do spirit is great, but you've got to be honest with yourself about your physical and psychological fitness to fly, as the second example shows.

The H-3 crew departed for an offshore exercise just before 2300 hours. After initial climb and level-off, the copilot noticed that the number two generator-out light was illuminated. The generator wouldn't reset. They flew a few more miles and entered IMC in a rainshower. The AC decided to abort the mission and flew the helicopter back toward the landing zone.

The AC made three unsuccessful approaches and gave control to the copilot, stating, "I don't think I can get it down. I don't know what's wrong, but I don't think I can land." The copilot took control of the H-3 and tried to calm the pilot. He flew the copter around the pattern and lined it up with the landing zone.

". . . I don't think I can get it down. I don't know what's wrong, but I don't think I can land."

The right-seat pilot reassumed control of the helicopter about three miles out at 300 feet above the water and 70 KIAS. They soon encountered light rain and the copilot warned the AC that they were descending through 150 feet. Suddenly, the copilot noticed salt spray and pulled in maximum collective.

The H-3 struck the water, struggled back into the air, dropped back into the sea, and sank rapidly. A small boat rescued the copilot less than 30 minutes after the crash. The aircraft commander was never seen again.

That AC was an experienced helicopter pilot and the detachment commander. He had over 2,500 flight hours with over 800 in the H-3. He also had personal problems. His marriage started coming apart about six months before the accident. His wife had recently sued for a divorce, which the pilot resisted at first but finally resigned himself to. Members of the detachment had reservations about his professionalism and the image that he was presenting to higher command levels. The AC had been reluctant to come on this deployment, but decided to join in at the last minute. Two weeks before the accident—known only to his closest associates—he decided to resign as detachment commander.

The man had a lot on his mind as he climbed into the helicopter that night. We'll never know exactly what went on in his brain as the H-3 approached the landing zone, but it's a good bet that he was preoccupied with personal problems. He may have been looking at the instruments, but probably never really saw them or heard his copilot's warning.

Man is uniquely adaptable and can normally survive in the hostile environment he enters when he flies—if he has his head screwed on right. We have learned to deal fairly well with human factor problems coming from outside the aircraft, like visual illusions, but the problems coming from within the crewmember still remain a great challenge. One thing is certain, we can't be responsible, safe crewmembers when we're preoccupied with concerns that are unrelated to our job. Further, we make a serious mistake when we tell ourselves that we can hack it, no matter what's happening at home. William Shakespeare had the idea when he wrote this line in *Hamlet*: "This above all: to thine own self be true . . . "

GLOBAL NOTES

15,000 Hours

SMSgt Joshua Kim, 7 MAS, Travis AFB, California, earned the MAC Individual Flying-Hour Milestone Award for amassing 15,000 hours of accident-free flying. Sergeant Kim received a letter of commendation from General Moore together with the patches which will proclaim his accomplishment.

Super Associates

Three Air Force reservists who performed outstandingly during 1977 in the aircraft maintenance field were presented awards by Brig Gen William E. Carson, HQ MAC/Deputy Chief of Staff, Logistics.

Capt Dennis R. Schnorr, 514 MAW (Associate), McGuire AFB, New Jersey, was named Outstanding Maintenance Officer. SMSgt Walter J. Seprish, 315 MAW (Associate), Charleston AFB, South Carolina, received the award for Outstanding Maintenance NCO. SrA Kenneth K. Lesmeister, 349 MAW (Associate), Travis AFB, California, was named Outstanding Maintenance Airman.

Winners are chosen on the basis of excellence in training, safety, organizational improvements, job procedures, recruiting, support of the MAC mission, personal appearance, and military bearing.

Twice in a Row

The 14 MAS, Norton AFB, California, received the USAF Nuclear Safety Plaque for its performance during 1977. Maj Gen Charles F. G. Kuyk, Jr., Commander, 22d Air Force, presented the award to Lt Col John T. Massingale, squadron commander. During 1977, the 14th safely completed 352 nuclear airlift sorties, 190 of which were international flights. The unit received the award for the second consecutive year.

Personnel Changes at TMF

Capt Bruce L. Gumble, associate editor with *The MAC Flyer* since March 1976, departed at the end of September for flying duty at Travis AFB.

Taking over Captain Gumble's desk will be Maj Alan D. York from Dover AFB, Delaware. Major York was assistant chief of the 436 MAW's Airlift Control Element and a C-5 aircraft commander.

Creative Solutions

For protecting their C-141 from damage during a tropical wind storm, Maj William A. Waldow, flight examiner aircraft commander, and Capt Gary G. Anderson, aircraft commander, both of 4 MAS, McChord AFB, Washington, received MAC Distinguished Individual Safety Awards. After the C-141 crew had landed at Eniwetok and unloaded the aircraft, their radar indicated a squall line in the area. When increasing winds and rain prevented takeoff, the AC turned the aircraft into the wind and shut down the engines; but the constant shifting of wind direction made it necessary to tie down the aircraft. However—there were no tiedown locations on the ramp. Major Waldow and Captain Anderson decided to tie the nosegear to a forklift and use Army LARC's (amphibious vehicles) to block the wind in front of the wings. The LARC's successfully diverted winds of from 40 to 50 knots, with gusts up to 70 knots, and the C-141 suffered only salt spray damage.

Since all his friends are out of town for the holidays, the Solo Celebrant bends his bartender's ear with some chronicles of Christmases spent out in the system.

I'll bet you don't know why fighter pilots always fly so close together in formation whenever they go someplace," the Lonesome Lothario challenged the somewhat beleaguered bartender in a weak effort to lift both their spirits.

"You're absolutely right, I don't know," replied the barkeep, adding defensively, "I did my time in the Navy."

"Well, the reason is quite simple, my man," beamed C.R. "Only one of 'em knows the way!"

"Hey, that's pretty funny, Maj," chuckled the 'tender, "but now I have a question for you. How come on Christmas Eve, the best known pilot and man about town in these parts is here at the O'Club all alone, holding up the bar?"

"One of the perils of bachelorhood, Joseph," sighed the solo Yuletide celebrant, "is that sometimes on holidays all your friends bug out. Fr'instance, Tassels left yesterday for a few days with her widowed mother, while Blinky and Sam are both off to spend the holidays with their families and various inlaws and outlaws. No biggie, though; tomorrow I'll just toss a turkey pot pie in the oven, crack open a can of cranberry sauce, and following that less than regal repast, I'll catch some football games on TV."

"Speaking of repasts, here let me get you a refill on the bar snacks, Maj," offered the obliging grog dispenser.

Mumbling through a mouthful of salted goobers, C.R. took a long, noisy pull at his Terrorific 'Tini and launched into a reverie. "Ya know, Joe, this reminds me

of a Yuletide that I spent out in the system, back during the Vietnam fracas. We were alerted Christmas Eve day at Mactan to fly our C-124-load of hairspray and diet sodas to Tan Son Nhut. It was dark by the time we landed in country, and as usual the offload took awhile. We had plenty of time to flight plan, file, and find out all the latest war gossip from the ACP desk jockey. After that we went out and sat around on the ramp near our Shakey for over an hour watching the parachute flares and tracers and listening to the clatter of the Sandys coming and going. It wasn't much of a Christmas Eve, but I guess it sure beat the heck out of being out in the rice paddies someplace, sparring around with the VC."

"Where'd you end up Christmas Day?" the bartender broke in.

"On the return leg, we RON'd at Clark . . . landed there just before the sun put in an appearance. Nothing was open, of course, and we were really famished. Once we were settled into the house trailers that passed for VOQ's, the copilot, nav, and I dug into our flight bag 'emergency' chow supplies, pooled our meager assortment of consumables and came up with a feast of Spam, three kinds of crackers (all stale), Cheez Whiz, and Fig Newtons. We washed it all down with several semi-cool San Miguels from the BOQ Office. I tell you, Joe, war can be hell. You really had to be tough in those days to fly the heavies."

The bartender watched until the nonstop storyteller paused to catch his breath and then jumped in, "Ready for another 'tini, Maj?"

"You bet, and this time make it dry enough to dehydrate a camel, if you pleeze." Fumbling in his pocket for a moment, the leather-lunged loquator withdrew a pack of gold-ring Egyptian Ovals. He inserted one of the 100mm coffin nails into his microtronic-filtered ebony cigarette holder, lit it, and then pushed his Zippo across the bartop to the rathskeller roustabout. On the battered lighter was the following inscription: "Given with deep appreciation to Capt. C.R. Terror, who almost rescued me." It was signed, "Happy landings, Manifred Fest."

"Okay, Maj, you win again, what's the story behind the strange inscription on the Zippo?"

"Would you believe another Yuletide-type tale, my fine-feathered purveyor of potables?"

"Try me, Maj," replied the captive audience of one.

"At the time of this little episode," began the Ace of Aerospace, "I was an exchange officer with the Royal Canadian Air Force. My crew was TDY to Goose Bay for the month of December on a special readiness exercise—Frostbite Whammy, I believe it was called. At any rate, about a week before Christmas, one of our transports went down in a snowstorm somewhere between Deception Bay and Muskox and everybody who had something that would fly fell out en masse to help with the search. Luckily the weather cleared in a couple of days, and on the third day we found the airplane on a frozen lake in the middle of absolutely no place. Everyone had survived the controlled crash landing, and Captain Fest had stomped a big 'X' in the snow that we could see as we made a low pass in our C-47. We could also see him waving his arms and pointing to the X. Since his plane appeared to have landed intact, I took Fest's gestures to mean that he wanted us to come on down, land, and pick up survivors.

"We made a couple more low passes, decided it looked suitable enough for a landing, and brought our Gooney Bird around. I set the old girl down as smooth as silk just past Fest's big X, but quick as a wink we were up to the cowl flaps in snow and stuck tighter than the cork in a bottle of Rose Mateus."

"What did you do then?" probed the mixologist while C.R. paused again to soak up some more of his Sirocco Socko. Spearing the olive with a picador-like flourish and popping it into his mouth, he continued.

"Well, there wasn't a whole lot we could do but wait for somebody to rescue us, along with Fest and his gaggle. That same day, the weather turned really rotten again, so we got to spend Christ-

mas and New Year's both, camped out in the Canadian wilderness. I was so cold for so long my ear lobes still tingle every time I think about that little misadventure. I don't know which was worse though, the frigid temperatures and snow up to my armpits, or the wild laughter that 'Manny' would break into every time he looked at me."

"How could he laugh, Maj, considering that he put the X in the snow and waved for you to land?" interjected the puzzled publican.

"Because he had stomped the X into the snow to try and show me that it was *too deep* to land—that's why!" explained the would-be good Samaritan.

"Now that I'm rolling, mix me one more libation like the last, and I'll tell you about a Christmas I spent on Wake Island—before I brave the foul elements outside and head for my penthouse to hang up my Christmas stocking."

His vocal cords suitably lubricated once again, the Great Circle Gallivanter launched into his final fable of the evening. "I was only a mere lieutenant in those days," he began, "and we were flying the Pacific on the way home from a Tachi Turnaround. Thanks to two inop props on our C-133, we had had all the shopping time in the land of one-time-good-deals that any crew could dream of. But the maintenance delay on prop changes ran us too long to get back Stateside with our plane-load of goodies in time to play Santa Claus on schedule. So, we ended up very early the day before Christmas with an RON at Wake Island. After spending the day sacked out, we were alerted late in the afternoon on Christmas Eve and went over to the consolidated contract dining hall to chow down. Now at that well-known feeding facility, Joe, they used to have enormous gallon jars of peanut butter, and on request the Filipino waiters would bring one to your table for the crew-members to share. Second and third helpings for any meal except steak dinners were available for the asking, but there were signs plastered all over the chow hall warning people against taking any food whatsoever out of the place. Everybody on our crew happened to have a taste for peanut butter, and there was some idle speculation during the meal about the possibilities of getting away with one of the big jars. Eventually it turned into a challenge by the enlisted guys that the new co-pilot, namely me, ought to be able to do the dastardly deed. I thought about it for a few micro-seconds and decided that the oversized jar of Skippy wouldn't be missed, and besides it would make nice Christmas sandwich treats for the crew on the long haul to Hickam."

"Didja get away with the goober spread?" interjected the intrepid intoxicator.

"Easy as pie, Joe. By the time we finished eating, everybody who worked in the place was back in the kitchen, so I just picked up the jar and walked out with it. Flight planning and pre-flight went off without a hitch, and our Oscar Meyer Special was climbing like a homesick angel toward 100-out and our assigned altitude when the flight engineer called on interphone for the AC and me to take a look back over our shoulders. There on his desk was the prettiest little Christmas tree you ever saw. 'Merry Christmas, y'all,' he beamed with the pleased grin of the cat that ate the canary.

" 'Isn't that the tree that was in the Wake terminal building?' asked the AC with a look of concern clouding his countenance.

" 'Yes, sir, it sure is,' came the gauge gazer's glib reply. 'But don't you worry none, sir, 'cause we left a pyramid of soda water cans on the table in its place.'

" 'I hope the folks at Wake have a sense of humor,' was barely out of the woebegone AC's mouth when the radios came alive with calls from Wake for our bird. To make a long story short, the folks at Wake didn't have a sense of humor, but the surprising thing was that they made more fuss about the purloined peanut butter than they did about the kidnapped Christmas tree. After a brief parlay on UHF with the island commander and the Wake sheriff, who agreed that nothing more would be said about the incident if we returned the items in question ASAP, we did a 180

just past 100-out and ziggied back.

"I don't know which was more painful for me—personally delivering the peanut butter back to the big red-headed dietician who ran the chow hall with an asbestos-gloved fist or trying (along with the AC) to explain to the commander why we had to duck back into Wake with an apparently healthy airplane—running ourselves out of crew duty time to get to Hickam and spending an extra day out on the road in the process. He had even less sense of humor than the Wake Islanders, and I guess the only thing that saved us from being skinned in both cases was the prevailing charitable spirit of the Yuletide season."

"You've certainly had some interesting Christmases, compliments of the transport command, Maj," quipped the suds server, "but it looks like this one will be pretty tame for a change."

"I'm afraid your assessment is extremely astute, Joseph, but I will find ways to amuse myself, rest assured. Besides, a little solitude is good for the psyche every once in awhile. Right, Mr. Beertender?"

"Absolutely, Maj," he concurred with even less conviction than his paunchy patron.

C.R. moved toward the back door of the club to make his exit, but before he could grasp the knob the heavy wooden portal swung open with an icy blast and a swirl of snowflakes, almost knocking him down.

"Excuse me," came a soft-voiced apology as a young woman closed the door, and pulled down the fur hood of her parka. She was a symphony in white from the cowl neck of her heavy ribbed ski sweater to her suede, calf-length boots. The paleness of her ensemble contrasted with the blush the cold had brought to her cheeks and the deep blue of her eyes.

"No apologies needed, m'lady," the bedazzled bachelor finally managed to blurt out as he fairly basked in the radiance of the lovely young lass confronting him.

"My name is Lieutenant Ptarmigan," she introduced herself, "and I was on my way to the terminal cafeteria for a late snack when my car bogged down in the snow outside the club. Do you think you could help me, sir?"

"I'm C.R. Terror, and I'd certainly be glad to take a look and see just how serious a dilemma you're in," offered the Most Helpful One as he reopened the door, took the lieutenant's elbow and the two of them stepped out into the winter gale. It didn't take long for him to figure out that her small automobile, which had slipped off the road and was leaning to one side with two wheels in the ditch that paralleled the pavement, was hopelessly stuck.

"Looks to me like it's hopelessly stuck, my dear. But never fear, because I would be more than happy to take you any place you like," volunteered the Overly Opportunistic Operator, adding, "I could use a cuppa java and a late-night snack myself. Did you say your name was Lieutenant Parmesan?"

"That's close, but just call me Pastel . . . all my friends do. But I don't want to put you to any trouble, sir," she protested weakly above the howl of the wind.

"No trouble, believe me," the amour-minded aeronaut reassured her as he opened the door of his low-slung Jag and made a grand gesture for her to cilmb in. "And please . . . call me C.R."

Waiting for all eight cylinders to come up to temp, the Fast Mover couldn't resist a variation on the age-old question, "By the way, m'little snowbird, what in the world is a nice girl like you doing all alone on such a frosty Christmas Eve?"

"Well, my folks live too far away for me to make it home this year, and all my friends left for the holidays, so I ended up just spending them here by myself," explained Pastel forlornly.

"Imagine that," mused C.R. to himself as he gave her a look composed of mock chagrin and genuine compassion, slipped the XKE into gear, and eased out of sight into the biting blizzard.

Quick Stoppers

Double Trouble

The Starlifter was on climbout when the number two engine low-oil-quantity light came on. Oil pressure was steady and normal, but the warning light remained on through climb and cruise. After an hour and 20 minutes, the number two oil pressure started fluctuating and the low-oil-pressure light started blinking. When the light came on steady, the pilot shut down number two and headed for home. On descent, just to make the approach more interesting, number three engine joined in with a low-oil-pressure light and fluctuating oil pressure. Another precautionary engine shutdown was accomplished—that left two turnin'. The crew made a safe, two-engine approach and landing. A closer look revealed that number three had a faulty oil pump and low-oil-quantity switch. Number two, however, had been underserviced at the preceding stop. Studies have clearly shown that the TF-33 engine runs much better when well oiled.

A "Bad Trip" Was Had By All

As the jumbo jet climbed through FL 270, the crew received a rather confused call over the interphone stating that a passenger was being suffocated. Actually, the passenger was being subdued by a male flight attendant after having what appeared to be an LSD-type flashback. The young man, approximately 18 years old, was first observed violently shaking the seat in front of him and slapping at the woman occupying it. He was also squeezing the thigh of the female passenger seated next to him. The male flight attendant noticed this unusual behavior and asked the teenager to please settle down. When that failed, he took hold of the young man's wrists, whereupon the youngster lunged at the attendant, appearing to bite him. The attendant then wrestled him into a headlock and asked a nearby female flight attendant to call the captain. The troublesome passenger was finally secured to his seat and his legs tied to prevent him from kicking. He informed those around him that he had been taking "angel dust" and proceeded to twitch violently and foam at the mouth. Other young passengers in his tour group told the crew that he had experienced periodic "LSD" flashbacks in the past. An oral tranquilizer was administered by a doctor traveling on the flight, and it seemed to help calm the teenager.

Meanwhile, back in the cockpit, the captain informed ATC that he was returning to the airport and requested medical and police assistance upon landing. After 34,000 pounds of fuel were jettisoned, a safe landing was made and the disturbed young man was taken away.

QS

Obstreperous Huey

Thirty minutes into a local training flight, the UH-1N decided to make the next practice autorotation a little bit more realistic for the intrepid aviators flying her. When the pilot rolled number one throttle to flight idle, the idle stop did not do its thing. Consequently, the throttle went all the way to the off position, flaming out the engine. Fortunately, human skill and cunning prevailed. Number two engine was quickly rotated to full open. Too low to make a single engine go-around, the instructor pilot slid in safely on one engine. Seems the flight idle stop was out of adjustment.

Machine Gun Jolly

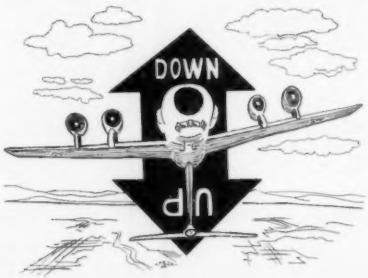
The Jolly Green crew was flying a combat SAR exercise. After firing the two M-60 machine guns at simulated targets on the gunnery range, survivor pickups were made, followed by more gunnery practice. The crew experienced numerous jams or double-feeds on number one gun. In response to the aircraft commander's orders, the gun crews reported both guns cleared and safetied before departing the range. While returning to base, the gun crew decided to remove the bolts from the M-60's. Number two gun bolt was removed with no problem. The bolt on number one wouldn't budge, so the gunner removed the gun from the mount and brought it inside where he could get a better grip on it. When he disconnected the link shear rod from the trigger assembly, the gun went "boom," firing a round into the cargo floor, passing through the forward fuel tank, and exiting on the right underside of the aircraft. Taking all this in, plus the forward fuel-low caution light and the fuel gauge's dropping to below zero, the pilot made an immediate emergency landing in a field. The crew, including the red-faced gunner, were returned to base in another Jolly Green. "Checklist complete" means "Checklist is really complete—no foolin'."

Which Way Is Up?

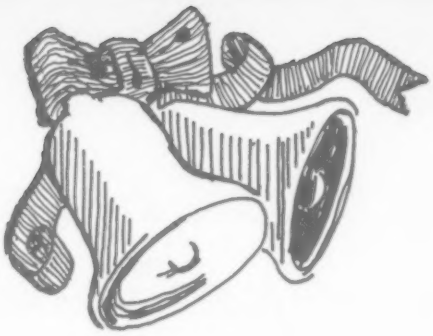
Let's say you've just departed from a MAC base in your trusty Starlifter. The weather is 700 overcast with three miles visibility in light rain. En route weather includes cloud bases at 8,000 feet with tops to 39,000. As you pass 2,000 feet, the copilot's ADI tumbles. Two minutes later, your ADI does likewise. You're VMC between layers at 4,000 feet—but it's getting dark. Now what?

The 141 crew who actually faced this hairy situation stayed at 4,000 feet and used the world's biggest attitude indicator (that's the horizon) to stay right-side up while they started troubleshooting. Selecting emergency power didn't help. Neither did isolating the generators or pulling and resetting a batch of circuit breakers.

Finally the crew decided to climb a few thousand feet and stay in good weather while they worked on the problem. The ADI's seemed to be indicating the proper bank angle, but pitch indications were completely unreliable. As they climbed, maintaining visual conditions as much as possible, the crew turned off the number one generator. For some reason, both ADI's immediately came to attention and kept working properly for the rest of the flight, although both flight-director steering bars were still inoperative. The relieved 141 drivers pressed on for an uneventful landing at home station.



During postflight engine run, maintenance found that the number one CSD was fluctuating, with the generator's output following the throttle setting. Both gyros ops-checked okay. Shutting off a generator may not always correct a gyro problem, but it did this time. The airplane, with a new CSD, is back in business—and still flying right-side up.



Shear Folly

Wind shear reared its ugly head once again recently and the result was a near-catastrophic accident involving a commercial jet. The airliner struck powerlines and poles after takeoff, substantially bruising the belly of the big passenger bird. The crew was able to get the jet back on the ground safely. Later, they must have asked themselves the inevitable question: "How did it all happen?" Like so many accidents, a combination of individual events and actions conspired to reduce the margin of safety, and all the little clues that whisper, "Watch out," went unheeded.

The aircraft was near max gross weight and needed almost four knots of headwind to legally take off from the active runway. Planning on a headwind to allow a takeoff at a high gross weight is valid only if the headwind is really there. The tower was reporting gusts of up to 50 knots before takeoff with rapid shifts in direction of as much as 90 degrees. Blowing dust hindered the crew during taxi-out, and takeoff roll began into a 40-knot headwind. This diminished to no wind at midpoint and a right quartering tailwind which increased to 28 knots during liftoff.

The captain had not been trained in any techniques which could be used to overcome windshear hazards. There were no approved operating procedures for trading airspeed (if he had any to spare) for altitude to gain that extra few feet that could have made all the difference. The fact that he didn't use the extra 500-foot displaced threshold available to him for takeoff might also have contributed to the final outcome. The bottom line, however, is that the crew was unable to recognize a hazardous situation even though a number of clues were blowing in the wind.

Surging Sabres

The Sabreliner had been airborne for 20 minutes when the right fuel-pressure-low light came on and the right fuel boost pump circuit breaker popped. The crew went through the appropriate emergency procedures and returned to base. Things went smoothly until after landing with, 2,000 feet remaining and a speed of between 70 and 80 knots. Both throttles were at idle when the right engine rpm began increaseing rapidly. As the rpm passed 80 percent the pilot shut down the wayward engine and came to a safe stop. Investigation determined that the fuel control drive shaft had sheared due to internal failure within the fuel control unit.

The fuel system is designed to maintain approximately 80 percent rpm in the event of drive shaft failure. Fortunately, the pilot didn't wait to see if the engine rpm would, in fact, stabilize at the predetermined rpm.

You Can't Be Right All the Time Department

I do not think it at all probable that aeronautics will ever come into play as a serious modification of transport and communication.

—H. G. Wells, 1903

After Deadline

A JET OF HIGH PRESSURE HYDRAULIC FLUID can be very penetrating and injurious, and a warning to that effect will be included in Section III of the C-141 Dash One when it is republished next spring. Meanwhile, if you suspect a landing gear system leak, stay well clear of the offending components. Chock only those wheels that are not in the suspect area, release the brakes ASAP, and leave the rest to maintenance. Serious bodily harm can result from high pressure leaks, and they may not even be readily visible.

SPEAKING OF C-141's, Starlifters have been experiencing some pressurization problems and a couple of crews have had the opportunity to try out emergency oxygen drills for real. If you haven't done so lately, it might be a good idea to get reacquainted with your quick donner and its assorted mechanisms, BEFORE Murphy's Law catches up with you.

IF ALL THE DIRE PREDICTIONS ARE ACCURATE, we'll have plenty of opportunities for battling the snow demons the next couple of months. Problems have already come up with aircraft that were assumed to be okay because no snow had accumulated on the wings. Nobody checked out the tail, which turned out to have a sizeable amount of wet snow that froze on climbout and caused control problems. Don't take anything for granted--the only reason the wings were snowfree was because they had recently been filled with enough warm fuel to prevent flakes from collecting there.

ATTENTION SAFETY OFFICERS: Change 1 to MACR 900-3, Safety Award Program, has been distributed. Be sure you get your copy. Among other things, check into the "accident-free status" definition on page 3; it should help to clear up some questions on chargeability.

AND BY THE WAY, the entire Flyer gang wishes all you faithful readers and fans out there a Colossal Christmas and a Topflight, Prosperous, and SAFE Seventy-nine.

The MAC Flyer 1978 Index

Title	Month	Page
Accident Incident Discussion		
Deep Six	May	22
Say Winds	Aug	3
Strike One—You're Out	Oct	14
The Swinging Crewchief	Aug	12
Accident Prevention		
A Full Time Navigator	Jul	8
Cooperate and Survive	Oct	3
Eliminating the Wife Error	Jun	18
No One Outgrows the Need	Nov	19
Power To Spare	Jul	12
Programmed for Landing	Feb	21
Silent Sermon	Mar	21
Wings, Wizards and Wisdom	Sep	20
Editorials and Letters		
A Tough Act To Follow	May	3
CINCMAC Christmas Message	Dec	3
Have a Safe Flight	Feb	3
Not in My Cockpit	Aug	9
Requiem for a Daredevil	Sep	6
Secretary of the Air Force Safety Award	Apr	3
The First 30 Years	Jun	3
The *Flyer's* Approach	Jan	5
Facts and Reports		
Accident Statistics for 1977	Apr	4
Pitot-Static Pitfalls	Feb	12
The Viewer's Guide	Mar	23
TMF Gets a Checkride	Jan	3
Human Factors		
Dear Doc	Nov	4
Eliminating the Wife Error	Jun	18
Looking Back at Human Factors	Dec	20
The Pinger	Jan	6
The Unsafe Condition	Apr	6
Operations		
Aerodynamics		
Captain Marble's Magic Maneuver	Jul	6
Engineer to Pilot	Oct	10
Understanding Fin Stall	Sep	13
Aircrew—Fixed Wing		
Alone	Dec	4
A Matter of Degrees	Jan	20
Bermuda High	Sep	8
Hunting for Trouble	Jan	13
Mummph's Memoirs	Jun	13
Reject !	Mar	18
Special Delivery for Moscow (Part One)	Jan	9
Special Delivery for Moscow (Part Two)	Feb	4
Aircrew—General		
A Flying Fable	Nov	13
Aircrew—General—Continued		
Conflict Alert	Mar	7
Fuel Salvation	Apr	10
More Than You Bargained For	Dec	13
The Last 300 Feet	Nov	8
The Old Pro	May	19
VDP	Apr	18
Aircrew—Helicopter		
Another Bit the Dust	Mar	14
Captain Marble's Magic Maneuver	Jul	6
Fools Rush In	May	10
Whiteout!	Nov	14
Regular TMF Features		
Good Show		
Maj French, Capt Gavin, and SSgt Miller	Apr	9
Capts Kidd and Kenna	May	18
Capt Boab and Crew	Jul	14
Capt Schricker and Crew	Nov	18
C.R. Terror		
Communication Retardation	Jan	25
Taxi Troubles	Feb	25
Dreams of Command	Mar	25
C.B. Terror	Apr	25
Medevac Menace	May	25
C.R. Remembers	Jun	25
Wrong Way Terror	Jul	25
Simulator Hater	Aug	25
C.R. Goes DNIF (Part One)	Sep	24
C.R. Goes DNIF (Part Two)	Oct	24
Hamilton Hand's Revenge	Nov	25
C.R.'s Christmas Reverie	Dec	23
Deja Vu		
JFK Intl, Bolivia	Jan	24
Robert Gray AAF, Texas	Feb	24
Howard AB, Panama	Mar	22
Hill AFB, Utah	Apr	24
Norton AFB, California	May	24
McChord AFB, Washington	Jul	24
Cubi Point, Philippines	Aug	23
Iwakuni MCAS, Japan	Sep	23
Sparrevohn AFS, Alaska	Oct	23
Yokota AB, Japan	Nov	24
Taegu AB, Korea	Dec	18
MAC Flying Safety Contest Stories		
A Matter of Degrees	Jan	20
Fail-Safe?	Feb	9
The MAC Average	Mar	13
The Unsafe Condition	Apr	6
Fools Rush In	May	10
Mummph's Memoirs	Jun	13
The Bear and the Boy	Jul	4
The Amen Corner	Aug	4
Bermuda High	Sep	8
No Significant Notams	Oct	5
The Saga of the Bandersnatch Warning Light	Nov	21
Alone	Dec	4
Mishaps with a Moral		
. . . contact departure. So long.	Feb	18
A Long Ten Minutes	Mar	4
Hot Wheels	Jun	11
We've Lost Both Engines . . .	Jul	21
Pay Attention!	Aug	7
Maintain VFR	Oct	8
Tragedy in Paradise	Nov	6
The Airlift Legacy		
C-118	Jan	16
SA-16	Feb	16
HH-43B	Mar	16
C-133	Apr	16
C-121	May	16
C-130	Jun	16
C-74	Aug	16
H-21	Sep	16
WB-50	Oct	16
C-97	Nov	16
C-119	Dec	16
The Flying Circus	Sep	3
The Sage Brush	Jan	19
	Feb	8
	Mar	24
	Apr	23
	May	14
	July	15
	Aug	20
	Sep	12
	Oct	21
	Nov	12
	Dec	12
Weather		
Downburst	Apr	12
Too Hot To Handle	Aug	21
Windshear for Navigators	Apr	15
Windshear for Pilots	May	4
Miscellaneous		
An Airlift Lexicon	Oct	20
C-141 Anniversary	Dec	10
Evolution	Jun	7
Rescue Force	May	7
Roll of Honor	Jul	16
Roots	Jun	4
The Garbled Word	May	12
The Good Ol' Days	Sep	18
The Great Watertown Snowplow Caper	Dec	8
The TALO, MAC's Man in the Army	Aug	10
1977 MAC Safety Award Winners	May	8
2008: An Airlift Odyssey	Jun	21
When Flying Was for the Birds	Dec	19

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Touch 'n Go

**You can come out now, Cranston,
the thunderstorm has definitely passed.**